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AP/3724
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PTO/SB/21 (04-04)

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/077,718
	Filing Date	February 15, 2002
	First Named Inventor	Daniel Bone et al.
	Art Unit	3724
	Examiner Name	Clark F. Dexter
Total Number of Pages in This Submission	Attorney Docket Number	0275S-000327/DVA

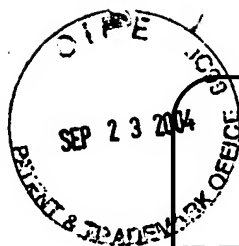
ENCLOSURES (check all that apply)				
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Receipt Postcard		
<table border="1"><tr><td>Remarks</td><td>The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. EV 531 989 977 U</td></tr></table>			Remarks	The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. EV 531 989 977 U
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name Michael J. Schmidt	Reg. No. 34,007
Signature			
Date	September 23, 2004		

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Signature		Date	September 23, 2004

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 330

Complete if Known

Application Number	10/077,718
Filing Date	February 15, 2002
First Named Inventor	Daniel Bone et al.
Examiner Name	Clark F. Dexter
Art Unit	3724
Attorney Docket No.	0275S-000327/DVA

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None
Order

☒ Deposit Account:

Deposit
Account
Number

02-2548

Deposit
Account
Name

Black & Decker, Inc.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee
to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1)

(\$) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims		-20 **	=	0	X		=	0
Independent Claims		-3 **	=	0	X		=	0
Multiple Dependent					X		=	0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	330
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$) 330

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Michael J. Schmidt	Registration No. (Attorney/Agent)	34,007	Telephone	(248) 641-1600
Signature				Date	September 23, 2004

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Art Unit:	3724)	
)	
Examiner:	Clark F. Dexter)	
)	APPEAL BRIEF
Appellant:	Daniel Bone et al.)	
)	Appeal No. _____
Serial No.:	10/077,718)	
)	
Filed:	February 15, 2002)	
)	
For:	Clamping Mechanism)	
)	
Atty. Docket:	0275S-000327/DVA)	

Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is an appeal from the May 21, 2004 Final Rejection of Claims 22 and 23 of the above referenced patent application. Claim 24 has been indicated as allowable and Claims 25-28 are currently withdrawn from consideration at this time.

Claims 22 and 23 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Stoll (U.S. Pat. No. 2,175,488). Claims 22 and 23 are rejected under 35 U.S.C. §102(b) as anticipated by Kling (U.S. Pat. No. 464,100) or, in the alternative, under 35 U.S.C. §103(a) as obvious over Kling (U.S. Pat. No. 464,100) in view of Nicholson (U.S. Pat. No. 2,548,443). The claims on appeal are Claims 22 and 23 and these claims, along with pending Claims 24-28, are reproduced in Appendix A.

09/24/2004 ZJU HAR1 00000076 022548 10077718

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REAL PARTY IN INTEREST

Black & Decker Inc. is the real party in interest, being the Assignee of the present application. The Assignment for the parent Application, U.S. Serial No. 09/015,615, was recorded on January 29, 1998 at Reel 8951, Frame 0285.

RELATED APPEALS AND INTERFERENCES

To the best of Applicants' knowledge, no other appeals or interferences are pending which will directly affect, be directly affected by or have a bearing on the Board's decision in the present pending appeal.

STATUS OF CLAIMS

Claims 22-28 are pending in the present application. Claims 22 and 23 stand finally rejected. Claim 24 was indicated as being allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claims 25-28 are currently withdrawn from consideration.

STATUS OF AMENDMENTS

Applicants filed an amendment after final on August 12, 2004, amending Claim 22. In an Advisory Action mailed September 9, 2004, Paper No. 20, the Examiner indicated that this amendment will be entered and that this amendment overcomes the rejections under 35 U.S.C. §112 in the Final Office Action.

The Examiner noted in the Advisory Action that the Double Patenting rejection was not addressed in the after-final amendment. The reason for not addressing this rejection was because there was no Double Patenting rejection in the Final Office Action. The Double Patenting

rejection was made in the Non-Final Office Action mailed February 12, 2004, Paper No. 16. In response on March 8, 2004, Applicants filed a Terminal Disclaimer to overcome this rejection. In the Final Office Action, page 2, the Examiner indicated that the Terminal Disclaimer was reviewed and accepted.

SUMMARY OF THE INVENTION

Referring to Figures 1-3, the present invention relates to a clamping mechanism for clamping an object (50). The clamping mechanism comprises a housing (2), a rod (44) attached to the housing (2), and a clamping arm (40) which is rotatably mounted on the arm (44). The clamping arm (40) rotates through 360° around an axis of rotation (page 13, lines 1, 2). A non-releasable one-way rotary clutch (42) is positioned between the rod (44) and the clamping arm (40). The one-way clutch (42) permits the clamping arm to freely rotate in only one direction around the axis of rotation (page 15, lines 13-15). The clamping arm (40) has a center of mass which is spaced from the axis of rotation (page 14, lines 9-11). The vibrations of the saw are transformed into stepwise, progressive movement of clamping arm (40) in its direction of free rotation to clamp object (50) between a first supporting surface defined by the housing (2) and a second supporting surface defined by clamping arm (40) (page 14, lines 11-26). Thus, the clamping mechanism of the present invention is designed to have clamping arm (40) rotate in a single direction to clamp object (50) between two supporting surfaces with the non-releasable clutch (42) prohibiting rotation of clamping arm (40) in the direction opposite to its free rotational direction to release object (50).

ISSUES

Appellants present the following issues for review:

1. Whether or not Claims 22 and 23 are unpatentable under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Stoll (U.S. Pat. No. 2,175,488). A copy of the cited prior art is provided in Appendix B.

2. Whether or not Claims 22 and 23 are unpatentable under 35 U.S.C. §102(b) as anticipated by Kling (U.S. Pat. No. 464,100) or, in the alternative, under 35 U.S.C. §103(a) as obvious over Kling in view of Nicholson (U.S. Pat. No. 2,548,443). A copy of the cited prior art is provided in Appendix B.

GROUPING OF CLAIMS

Claims 22 and 23 stand or fall together.

ARGUMENT

BACKGROUND OF THE INVENTION

The present invention relates to a clamping mechanism which includes a clamping arm (40) that is rotatable in only one (forward) direction due to a non-releasable one-way clutch (42). The one-way clutch (42) prohibits the movement of the clamping arm (40) in the reverse direction. Once an object (50) is in engagement with or clamped between a supporting surface on each of the housing (2) and the clamping arm (40) by rotation of the clamping arm (40), the one-way clutch prohibits the release of the object (50) by prohibiting reverse rotation of the clamping arm (40).

STOLL (U.S. PAT. NO. 2,175,488)

Applicant respectfully traverses the rejection based upon Stoll. The Examiner states that Stoll discloses a mechanism that discloses every structural limitation of the claimed invention

including a housing (10), a rod (22) attached to the housing, a clamping arm (13) rotatably mounted on the rod, a non-releasable one-way rotary clutch (19) and a support member (11).

The Examiner has conveniently skipped a couple of structural limitations, specifically “said clamping arm and said housing each defining a supporting surface for engaging said object”. The reason that these structural limitations were omitted by the Examiner is because Stoll does not define a supporting surface on each of these elements since Stoll is directed toward a foot rest and thus has nothing to do with a clamping mechanism. Stoll is simply a different application for a one-way clutch.

The Examiner attempted to excuse this omission by stating that “Applicant appears to be arguing that the prior art does not teach or suggest the same intended use.” (page 5 of the Final Office Action). In his “Response To Arguments” section of the Final Office Action, the Examiner does not even mention the supporting surfaces structural limitation. While the intended use of a device may not be able to serve to patentably distinguish a claimed invention over the prior art, when there are specific structural limitations that allow a device to perform an intended use, the recitation of these specific structural limitations can serve to patentably distinguish a claimed invention. Even if the prior art performs all the functions recited in the claim, the prior art cannot anticipate the claim if there is any structural differences. **In re Ruskin**, 347 F.2d 843, 146 USPQ 211 (CCPA 1965) as implicitly modified by **In re Donaldson**, 16 F.3d 1189, 29 USPQ 2d 1845 (Fed Cir 1994). It is clear that Stoll does not disclose the supporting surfaces defined by Claim 22 of the present invention.

This then requires the Examiner to define these supporting surfaces inherently or by some other manner allowable under 35 U.S.C. §103. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motive either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to

modify the reference; second, there must be reasonable expectation of success; and third, the prior art reference must teach or suggest all of the claim limitations. The teaching or suggestion to modify the reference and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. **In re Vaeck**, 947 F.2d 488, 20 USPQ 2d 1438 (Fed Cir 1991). The mere fact that the reference can be modified does not render the resultant modification obvious unless the prior art also suggests the desirability of the modification. **In re Mills**, 916 F.2d 680, 16 USPQ 2d 1430 (Fed Cir 1990).

Here, the Examiner must define a supporting surface on the housing and a supporting surface on the clamping arm for engaging the object. Stoll is directed to a foot rest which utilizes a one-way clutch to allow for the adjustment of the height of the foot rest. Clearly, there is no supporting surfaces as defined in Claim 22 of the present invention and there is no teaching or suggestion to somehow define these supporting surfaces in the reference. To establish prima facie obviousness of a claimed invention, all claimed limitations must be taught or suggested by the prior art. **In re Royka**, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." **In re Wilson**, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

The concept of defining the two supporting surfaces in Stoll for engaging the object would actually render Stoll unsatisfactory for its intended purpose. The purpose of the system in Stoll is to allow for the height adjustment of the foot rest. Attempting to define the structure of Stoll as having two supporting surfaces for engaging the object and thus defining Stoll as a clamping mechanism would prohibit Stoll from any further adjustment once the object was engaged by the two surfaces. If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation

to make the proposed modification. **In re Gordon**, 733 F.2d 900, 221 USPQ 1125 (Fed Cir 1984).

KLING (U.S. PAT. NO. 464,100)

Applicants respectfully traverse the rejection based upon Kling. The Examiner states that Kling discloses a mechanism with every structural limitation although the Examiner then states that the housing of the brake is not shown. Realizing the lack of disclosure and teachings in Kling, the Examiner looks to Nicholson. Nicholson is directed to a lawn swing which has a crank (88) which applies a brake to stop the swing from moving.

Regardless of whether or not you create the non-existent housing in Kling by inherency or by combining Nicholson with Kling, Kling alone and Kling in combination with Nicholson still suffer from the same lack of disclosure of the supporting surfaces defined by Claim 22, the lack of teaching or suggestion to modify the prior art, the lack of the desirability to make the modification and the fact that making this modification would render Kling and/or Kling in combination with Nicholson unsatisfactory for its intended purpose as detailed above for Stoll. Thus, the discussion above regarding Stoll applies here to Kling also because Kling also lacks the supporting surfaces which would modify Kling to become a clamping mechanism. Both Stoll and Kling (alone or with Nicholson) require their mechanisms to continue to rotate which is clearly against the teachings and the limitations of Claim 22 of the present invention. Claim 23 depends from Claim 22.

CONCLUSION

Applicants respectfully submit that the prior art does not disclose all of the limitations of the pending claims and that the Examiner has not presented a prima facie case of obviousness for modifying the references to obtain Applicants' claimed invention.

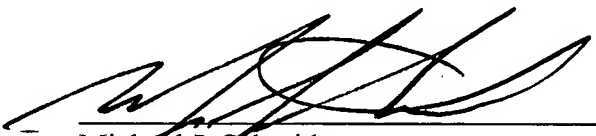
Applicants' invention provides the art with a self-actuating clamping mechanism which is neither disclosed, suggested or taught by the prior art. Accordingly, reversal of the final rejection of Claims 22 and 23 and the allowance of Claims 22-24 along with the rejoinder and allowance of Claims 25-28 is respectfully requested.

Respectfully requested,

HARNESS, DICKEY & PIERCE, P.L.C.

Date: September 23, 2004

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Michael J. Schmidt
Reg. No. 34,007

Attachments: Appendix A – Claims on appeal, allowed claim and withdrawn claims
Appendix B – Prior Art
Stoll (USP 2,175,488)
Kling (USP 464,100)
Nicholson (USP 2,548,443)

MJS/pmg

Appendix A

Claims 22 and 23 on appeal, allowed Claim 24 and withdrawn Claims 25-28 are as follows:

22. (on appeal) A clamping mechanism for clamping an object, said clamping mechanism comprising:

a housing;

a rod attached to said housing;

a clamping arm rotatably mounted on the rod, said clamping arm being rotatable through 360° about an axis of rotation, said clamping arm and said housing each defining a supporting surface for engaging said object;

a non-releasable one way rotary clutch positioned between and operatively engaging said rod and said clamping arm to permit the clamping arm to freely rotate in only one direction about the axis of rotation; and

the clamping arm having a centre mass spaced apart from the axis of rotation.

23. (on appeal) A clamping mechanism according to Claim 22 wherein the clamping mechanism further comprises a support member attached to said housing.

24. (allowed) A clamping mechanism according to Claim 23 wherein the support member comprises a slide element, the slide element being slidably mounted on the housing, wherein the clamping arm is rotatably mounted on the slide element so that the sliding movement of the slide element and clamping arm guides the object held between the support member and the clamping arm.

25. (withdrawn) A clamping mechanism according to Claim 22 wherein the clamping arm is adapted to be mountable on a saw via a reversing slip clutch which allows the clamping arm to rotate in the reverse direction to the direction of free rotation of the rotary one way clutch if a reverse torque is exerted on the clamping arm which exceeds a specified threshold.

26. (withdrawn) A clamping mechanism according to Claim 25 wherein the one way rotary clutch and the reverse slip clutch are co-axially mounted.

27. (withdrawn) A clamping mechanism according to Claim 22 wherein the clamping arm is made from a plastics material having a metal weight located towards an end of the clamping arm distant from the one way rotary clutch.

28. (withdrawn) A clamping mechanism according to Claim 22, wherein the clamping arm has a holding surface and an end distant from the one way rotary clutch, the distant end having a curvature lying in a plane, so that the curvature direction of the clamping arm end is opposite to the curvature direction of the holding surface.